

REPORT ON SLEEPING SICKNESS IN EKET DISTRICT, SOUTHERN NIGERIA

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(Received for publication September, 1922)

With the object of ascertaining the present position of sleeping sickness in the Eket District, Southern Nigeria, a tour of the whole district was made during April and May, 1922.

The route followed was from Oron to Awa, thus passing through the centre of the Eket District. The main towns at which I stopped and made enquiries were Oyubia, Ikorubo (site of old sleeping sickness camp), Eket and Awa, whilst numerous small, so-called villages were also inspected.

For the sake of clearness, and to avoid confusion, this report is divided into three parts:—

- (1) Result of cases recorded in the year 1912.
- (2) Result of cases not recorded in 1912, but who gave definite information that they had been inmates of the camp.
- (3) General enquiry into trypanosomiasis in the Eket District during the months of April and May, 1922.

The whole investigation has been most difficult, the people showing the greatest reluctance to impart any information on the subject, and it was only after prolonged interviews, which were most wearying, that eventually the information detailed below was obtained. Very great assistance was given by the District Officer, as well as by members of the Qua-Ibo Mission.

PART I

In Macfie's Report (1915) on sleeping sickness in the Eket District in 1913, the following passage occurs:—

‘During the sixteen months in which sleeping sickness has been under investigation, two hundred and twenty-two cases have been identified in which the trypanosomes have been demonstrated. In addition one hundred and fourteen cases have been met with presenting some of the clinical features of the disease, but in which parasites have not actually been found. There can be little doubt that the majority of these were cases of trypanosomiasis.’

The nominal roll of cases made by Macfie has unfortunately been lost, but I have assumed that the two hundred and twenty-two cases noted by him include eighty-nine definitely recorded cases, lists of which, either in manuscript or typescript, were compiled in 1912 by Foran and Gray, with a signed statement to the effect that all had been diagnosed microscopically.

Of these eighty-nine cases I was able to trace thirty-five, details of which are noted in Tables I and II. The remaining fifty-four cases have not been traced and nothing is known about them.

TABLE I.

Cases recorded in 1912 by Dr. Foran and Dr. Gray, and which are still alive.

Name	Age	Sex	Residence	When recorded	Remarks
Udo	9	M	Edem Idem Ekpot	8.8.12	Seen April, 1922. Healthy. No glands, but thickening on sides of neck which shows scars.
Usundurur	9	F	Ikorubo	7.8.12	Not seen. Is reported to be alive and well.
Enoesiet	adult	M	Afaha Eket	8.8.12	Seen 1922. Thickening on neck, with scars; no glands to be felt; strong and healthy.
Obotnt Ekim	12	F	Edem Idem Ekpot	8.8.12	Seen 1922. Strong and healthy; no glands to be felt.
Etok Awa	adult	F	Ikorubo	12.8.12	Seen 1922. Healthy; no glands to be felt. Slight scars on neck.
Adia	6	F	Idikpa	15.8.12	Seen 1922. Healthy; no glands to be felt. Slight scars on neck.

TABLE I—continued

Name	Age	Sex	Residence	When recorded	Remarks
Ekanem	11	M	Ikorubo	16.8.12	Not seen. Left the country apparently well.
Usoanwan ...	adult	F	Ikotesiokong	20.8.12	Seen 1922. Healthy. One small, very hard gland on neck.
Umwa Etok ...	7	F	Ikorubo	21.8.12	Seen 1922. Healthy; no glands or scars.
Amame	10	F	Ikotesiokong	24.8.12	Not seen. Alive and well, but refused examination.
Mama	17	F	Ikotesiokong	24.8.12	Not seen. Alive and well, but refused examination.
Okposen	adult	M	Ikotesiokong	27.8.12	Seen 1922. Healthy; scars on neck; three very small hard glands to be felt.
Adiah Ansudo ...	9	F	Ikotoquot	28.8.12	Not seen. Said to be alive and well.
Akpanitauwen ...	12	M	Ikorubo	28.8.12	Seen 1922. Healthy; one small gland on neck freely moveable.
Owoimaha	18	M	Afaha Eket	31.8.12	Seen 1922. Scars and thickening of neck.
Esoena	adult	M	Ikotesiokong	2.9.12	Seen 1912. No glands, but considerable thickening both sides of neck.
Peter Nsooyo ...	adult	M	Ekpenobo	11.9.12	Seen 1922. No glands, but scars both sides of neck. Strong and healthy.
Ntanwoo	14	F	Efrieoyo	13.9.12	Seen 1922. Healthy; a few very small hard glands felt. Gland puncture refused.
Samuel Akpanuso	adult	M	Ikorubo	24.9.12	Seen 1922. Healthy; a few small glands to be felt; gland puncture negative.
Eya	17	F	Effoe	22.9.12	Seen 1922. Healthy; no glands; some thickening.
Ema	9	F	Akai	20.5.12	Seen 1922. Healthy; scars and thickening, but no glands to be felt.
Wilson Akpan ...	9	M	Ikorubo	?	Seen 1922. One small gland felt; gland puncture negative.
Adiaha Esein ...	13	F	Inoiya	28.5.12	Seen 1922. Healthy; some scars and thickening of neck.

TABLE II.

Cases recorded in 1912 by Dr. Foran and Dr. Gray, and which have died.

Name	Age	Sex	Residence	When recorded	Date of Death	Alleged cause of Death
Adiansun...	18	F	Ikorubo	15.8.12	1918	Influenza.
John Opan ...	adult	M	Ikorubo	17.8.12	1921	Small pox.
Adong ...	9	F	Ikotesiokong	17.8.12	1916	Sleeping sickness.
Samso Okpa ...	12	M	Ikotesiokong	20.8.12	1921	Small pox.
Ikotumoanwan ...	9	M	Ikotoquot	22.8.12	1915	Sleeping sickness.
Edikpoi ...	18	M	Ikorubo	27.8.12	1912	Sleeping sickness.
Udouqua...	13	M	Ikotesiokong	27.8.12	1912	Sleeping sickness.
Eno ...	8	F	Okong	27.8.12	1918	Influenza.
Ekpo Awan ...	8	M	Ikotodiong	2.9.12	1918	Influenza.
Esukoku ...	12	M	Ikotesiokong	7.9.12	1915	Sleeping sickness.
Ikpeisak ...	11	F	Ikotesiokong	20.9.12	1915	Sleeping sickness.
Idimedoho ...	15	M	Ikotekong	23.9.12	1918	Influenza.

In the twenty-three cases still alive, noted in Table I, the blood was examined by wet and dry films, but in no case were trypanosomes found. It must be noted, however, that Gallagher and Macfie failed to discover trypanosomes in the blood of any of the cases, diagnosis in every instance being made by gland puncture.

Very few glands were punctured during the present enquiry, as in practically all cases the glands had resolved, or there was at most an indefinite general thickening. In a few cases there were one or two very small, extremely hard glands to be felt, fibrosis evidently having taken place. Scarring of the neck to a variable degree was common.

PART II

Apart from these thirty-five *recorded* cases, I saw at Eket twenty-eight *unrecorded* cases whom I accepted as being former patients at the camp from their history and from evidence, especially from members of the Qua-Ibo Mission, who furnished me with

documentary proof of their personal knowledge of the individuals. These cases were all in good condition, and did not exhibit enlarged lymphatic glands or any other evidence of trypanosomiasis.

I was also informed of the deaths of seven *unrecorded* cases who were stated to have been inmates of the camp.

It is possible that the above-mentioned unrecorded cases are included in Macfie's one hundred and fourteen cases who presented some of the clinical features of the disease, but in whom parasites were not actually found.

PART III

In endeavouring to ascertain if trypanosomiasis is still prevalent in the Eket District, as many persons as possible were examined in the towns and villages visited. As already stated, great difficulty was experienced, as there appeared to be a very great reluctance to impart information; in fact, so much so, that on several occasions it was necessary to invoke the assistance of the authorities in order to get the people of a particular place to come in for examination. At no place was this more marked than at Ikorubo, the site of the former sleeping sickness camp. I am informed that this was due to the fact that the chiefs and headmen of the various surrounding villages feared being called upon to furnish labour for another and new sleeping sickness camp.

Twenty-three cases were seen which exhibited signs suggestive of sleeping sickness, *e.g.*, enlarged glands, but gland puncture and blood examination were negative.

In all, one thousand eight hundred and six persons have been examined by gland palpation, and the following table shows the result. For purposes of comparison with the results recorded by Macfie and Gallagher (1914), the same age-groups classification of glands has been adhered to:—

- + = Glands obviously enlarged.
- + - = Sufficiently enlarged to be grasped.
- + - - = Enlarged, but not sufficiently to be grasped.
- - = Normal.

TABLE III.

The incidence of enlarged posterior cervical glands among 1806 natives classified according to sex and age.

Sex	Male			Female			
	Age	0-13	14-44	45-	0-11	12-39	40-
+		5 (0.88%)	4 (0.64%)	0	2 (0.64%)	4 (1.42%)	0
+ -		40 (7.04%)	7 (1.13%)	1 (5.0%)	22 (7.1%)	13 (4.63%)	0
+ - -		372 (65.5%)	210 (33.87%)	3 (15.0%)	171 (55.16%)	62 (22.06%)	0
-		151 (26.58%)	399 (64.35%)	16 (80.0%)	115 (37.1%)	202 (71.88%)	7 (100.0)
Number of individuals of each class examined ...		568	620	20	310	281	7

As regards the above table, it will be seen that a large proportion have glands that can be classified as + - - ; those with + - are considerably smaller, whilst the + is a very small figure to the total. The class -, or normal, equals 49.28 per cent. of the total examined. In plain words, it is very rare to see anyone who has enlarged glands to an extent that is noticeable. Enlarged glands are certainly common, and they usually take the form of small discrete, hard, shotty glands; in many cases they can be very well compared with buckshot. In a few cases the glands were observed to be suppurating, with a well marked sinus, or they were distinctly soft; now and again the post-auricular ones were enlarged, but this was comparatively rare.

Comparison of the above tables with those of Macfie and Gallagher shows a striking reduction in the proportion of individuals with enlarged glands.

The number of 'dirty heads' was most marked, ranging from a simple dry eczema to the most intensely deep punched-out necrotic ulceration. There is no doubt that the 'dirty head' was more common amongst males, and in a large majority of the heads classified 'dirty' the occipital glands were always involved.

Many hundreds of blood slides have been examined, both by the wet and dry methods, but in no case was a trypanosome found; similarly, gland punctures performed whenever possible were invariably negative.

The people of Eket are of a very poor physique, and many of them have the appearance of being ill-nourished and on the verge of starvation. Various diseases—yaws, syphilis, rheumatism—appear to be common. Eket is densely populated, the inhabitants living in scattered houses, and not in any definite towns.

Very few biting flies were found, but a few tsetse were captured.

SUMMARY

Of the cases seen and referred to in the Annual Medical Report for the year 1913, thirty-five cases have been traced out of a total of eighty-nine recorded by Foran and Gray, and of these twenty-three are alive and in good health (Table I).

In addition, twenty-eight cases have been traced who gave direct information as to their having been in the camp, but whose names were not recorded or cannot be traced. It is possible, however, that some of these twenty-eight cases were amongst the one hundred and fourteen noted by Macfie as presenting some clinical signs of the disease but in whom the condition was not diagnosed microscopically. In this connection it is gratifying to be able to state that the names of the various medical officers who had charge of the camp are well remembered, and on more than one occasion the name of the doctor in charge was given without seeking.

Sleeping sickness has not been demonstrated during the recent tour in Eket, although the cases selected for examination were chosen as presenting clinical signs of possible trypanosome infection. The natives themselves are of the opinion that the disease has died out, and this statement is borne out by the members of the Qua-Ibo Mission; at the same time this must not be accepted as a definite statement, because, as already noted above, the natives are not inclined to discuss the subject, and I am strongly of the opinion that a number of possibly genuine cases were removed from villages on my approach.

REFERENCES

- MACFIE (1915). *Southern Nigeria Annual Report* for the year ending 1913, pp. 56-62. Waterlow and Sons, Ltd., London.

- MACFIE and GALLAGHER (1914). *Ann. Trop. Med. & Parasit.*, Vol. VIII, p. 379.